NPDES PERMIT NO. NM0020311
FACT SHEET

FOR THE DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES

I. APPLICANT

City of Roswell Wastewater Treatment Facility
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II. ISSUING OFFICE

U.S. Environmental Protection Agency
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III. PREPARED BY

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IV. DATE PREPARED

June 20, 2006

V. PERMIT ACTION

Proposed re-issuance of the current permit with an issuance date of November 16, 2001, an effective date of December 1, 2001, and an expiration date of June 30, 2006.

Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed in Title 40, Code of Federal Regulations, revised as of June 16, 2006.

VI. PROPOSED CHANGES FROM PREVIOUS PERMIT

The proposed changes from the current permit with an effective date of December 1, 2001, and an expiration date of June 30, 2006, are:

A. A 7-day average loading limit has been included in the proposed permit to be consistent with the requirements of 40CFR122.45(d)(2).

B. Monitoring requirement for total mercury has been reduced from monthly to quarterly monitoring.

C. Monitoring for Flow, TRC, Fecal Coliform bacteria and E. coli *b*acteria are to be performed at Outfalls 001 and 002.

D. Limitations, monitoring requirements, and a compliance schedule for total aluminum, total copper, and E. coli bacteria have been established in the proposed permit.

E. Whole effluent toxicity testing requirements have been changed from acute to chronic based on the current "EPA Region 6 WET Permitting Strategy," as well as the State Narrative Implementation Guidance.

F. Incorporation of Pretreatment Program requirements that reflect changes in the General Pretreatment Regulations (40 CFR 403) brought about by the promulgation of the Pretreatment Streamlining Rule on October 15, 2005.

VII. APPLICANT ACTIVITY

Under the Standard Industrial Classification (SIC) Code 4952, the applicant's activities are municipal wastewater treatment operations.

VIII. DISCHARGE LOCATIONS

As described in the application, the plant site is located at 2306 East College Boulevard, in the City of Roswell, in Chavez County, New Mexico. The Outfalls are located at the following coordinates:

Outfall 001: Latitude 33° 24' 37" N, Longitude 104° 28' 45" W
Outfall 002: Latitude 33° 24' 50" N, Longitude 104° 27' 40" W

The effluent from the treatment plant is discharged into the receiving water named Rio Hondo, thence to the Pecos River for Outfall 001, and to Berrendo Creek, thence to the Rio Hondo, thence to the Pecos River for Outfall 002. Outfall 001 is located on the Rio Hondo approximately 1.5 miles upstream of the confluence with Berrendo Creek and Outfall 002, in water body Segment Code No. 20.6.4.206 of the Pecos River Basin. Outfall 002 in Berrendo Creek is an unclassified water body. In a 1995 letter from NMED, it was determined that

effluent limits for Outfall 002 in Berrendo Creek should be the same as Outfall 001 because of the close proximity of Outfall 002 to the Rio Hondo.

IX. RECEIVING STREAM STANDARDS

The general and specific stream standards are provided in "New Mexico State Standards for Interstate and Intrastate Surface Waters," (20.6.4 NMAC, amended through February 16, 2006). The designated uses of the receiving waters are irrigation, livestock watering, wildlife habitat, warmwater aquatic life, and secondary contact.

X. DISCHARGE AND PROCESS DESCRIPTION

A quantitative description of the discharge described in the EPA Permit Application, Standard Form A, signed and received December 27, 2005, and December 28, 2005, respectively is:

Table 1: Quantitative Discharge For Outfall 001 and Outfall 002

Pollutant	Maximum Daily Discharge, mg/l (unless noted)	Average Daily Discharge, mg/l (unless noted)
Ammonia (as N)	22	19
Chlorine (TRC)	ND	ND
Total Kjeldahl Nitrogen (TKN)	25	21.4
Nitrate plus Nitrite Nitrogen	8.84	4.9
Mercury Total	ND	ND

Analysis of dissolved oxygen, oil & grease, phosphorus, and Total Dissolved Solids (TDS) were not presented. Based on the nature of the facility, a Publicly Owned Treatment Works (POTW), it is the permit writers Best Professional Judgment (BPJ) that these parameters not reported would not change the permit requirements of this facility.

Table 2: Quantitative Discharge For Outfall 101

Pollutant	Maximum Daily Discharge, mg/l (unless noted)	Average Daily Discharge, mg/l (unless noted)
pH	7.8 S.U.	7.0 S.U.
Flow Rate	4.8 MGD	3.73 MGD
BOD5	46	19
Fecal Coliform	1420 col/100 ml	41 col/100 ml
Total Suspended Solids (TSS)	47	13
Total Aluminum	0.13	0.127
Total Copper	0.042	0.0145
Total Cyanide	0.02	0.002
Total Molybdenum	0.036	0.0164
Nitrate + Nitrite	4	4
Radium 226, pci/L	0.8	0.367

Pollutant	Maximum Daily Discharge, mg/l (unless noted)	Average Daily Discharge, mg/l (unless noted)
Radium 228, pci/L	1	0.633
Zinc	0.056	0.035

XI. SLUDGE MANAGEMENT, PRETREATMENT, OPERATION AND MONITORING, POLLUTION PREVENTION & MONITORING FOR POTW's

Sewage Sludge Requirements:

The permittee shall use only those sewage sludge disposal or reuse practices complying with federal regulations established in 40CFR Part 503, "Standards for the use or Disposal of Sewage Sludge." Part IV of the permit has conditions that apply to sludge generated at this facility.

The City of Roswell sludge is treated through anaerobic digestion. All sludge generated is composted. All of the sludge produced at the treatment plant is currently given away to the public.

Operation and Monitoring:

The applicant is required to operate the treatment facility at maximum efficiency at all times; to monitor the facility's discharge on a regular basis; and report the results monthly. The monitoring results will be available to the public.

Municipal Waste Water Pollution Prevention Requirements:

The permittee shall institute or continue programs directed towards pollution prevention. Publicly Owned Treatment Works (POTW's) shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility.

Reports Required:

The permittee shall submit an Annual Sludge Status report in accordance with NPDES Permit NM0020311, Parts I and Parts IV.

Industrial Contributors and Pretreatment Requirements:

The applicant currently receives industrial wastewater from two Categorical Industrial Users, and one Significant Industrial User. The facility operate an industrial pretreatment program in accordance with Section 402(b)(8) of the Clean Water Act, the General Pretreatment Regulations (40CFR403) and the approved pretreatment program submitted by the permittee. The pretreatment program was originally approved on March 20, 1985, and last modified on July 16,1993. Contributions to the wastewater treatment plant will be limited according to the requirements detailed in Part II, Section A of the proposed permit.

XII. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

The proposed effluent limitations for those pollutants proposed to be limited are based on regulations promulgated at [40 CFR 122.44]. The draft permit limits are based on either technology-based effluent limits pursuant to [40 CFR 122.44(a)], on best professional judgment (BPJ) in the absence of guidelines, and/or requirements pursuant to [40 CFR 122.44(d)], whichever are more stringent.

A. REASON FOR PERMIT ACTION

The current permit was issued November 16, 2001, had an effective date of December 1, 2001, and an expiration date of June 30, 2006. The permit application was received on December 28, 2005. The permit application was determined to be administratively complete and a completeness letter was sent to the facility on June 2, 2006.

It is proposed that the permit be issued for a 5-year term following regulations promulgated at [40 CFR 122.46(a)].

B. TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Following regulations promulgated at 40 CFR 122.44(1)(2)(ii), the draft permit limits are based on either technology-based effluent limits pursuant to 40 CFR 122.44(a) or on State Water Quality Standards and requirements pursuant to 40 CFR 122.44(d), whichever are more stringent.

Technology-based effluent limitations are established in the proposed permit for the following pollutants:

5-day Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS)

Water quality-based effluent limitations are established in the proposed permit for the following pollutants:

Total Residual Chlorine (TRC), Fecal Coliform Bacteria, E. coli Bacteria, pH, total aluminum, and total copper

Effluent limitations and conditions for BOD_5, TSS, pH, total aluminum, total copper, and WET testing are to be achieved at Outfall 101. Total mercury shall be monitored at Outfall 101. This monitoring outfall is a point identified after the last treatment unit but prior to the diversion of effluent to Outfalls 001 and 002. The permittee shall monitor for Flow, TRC, Fecal Coliform bacteria and E. coli bacteria from Outfalls 001 and 002.

B. TECHNOLOGY BASED EFFLUENT LIMITATIONS/CONDITIONS

1. General Comments

Regulations promulgated at [40 CFR 122.44(a)] require technology-based effluent limitations to be placed in NPDES permits based on effluent limitations guidelines where applicable, or on BPJ (best professional judgment) in the absence of guidelines, or on a combination of the two.

2. Effluent Limitations/Conditions

The proposed technology-based effluent limitations applicable to monitoring Outfalls 001, 002 and 101 are identified in Table 1 below. Again, Outfall 101 is a point after the last treatment unit but prior to the diversion of effluent to Outfalls 001 and 002. The permittee shall monitor the discharge from Outfalls 001, 002, and 101 during the period starting on the effective date of the permit and lasting through the expiration date of the permit.

The proposed permit limits are based on those limits established in the current permit in conjunction with the requirements established in 40 CFR 133.102.

Table 3: Technology-Based Limitations For Outfall 101

PARAMETERS/STORET	DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS			
	QUANTITY/LOADING		QUANLITY/CONCENTATION	
	(LBS/DAY, unless stated)		(mg/L, unless stated)	
	30-DAY AVG	7-DAY AVG	30-DAY AVG	7-DAY AVG
BOD_5 STORET:00310	1751	2627	30	45
TSS STORET:00530	1751	2627	30	45

The effluent loadings (LBS/DAY) are calculated using the treatment facility's design flow of 7.0 million gallons per day (MGD), the respective pollutant's 30-day average effluent concentration (i.e., 30 mg/L), and the conversion factor of 8.34.

30-day average BOD: 30 mg/L * 8.34 lb/gal * 7.0 MGD = 1751 lbs/day

30-day average TSS: 30 mg/L * 8.34 lb/gal * 7.0 MGD = 1751 lbs/day

The proposed permit establishes technology-based effluent limitations for BOD_5 and TSS based on those established in the effluent limitations guidelines applicable to the municipal wastewater process.

3. Monitoring Frequency For Limited Parameters

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity [40 CFR 122.48(b)] and assure compliance with permit limitations [40 CFR 122.44(i)(1)]. The monitoring frequency for the technology-based effluent limitations identified for Outfalls 101 are outlined in Table 2 below. The monitoring frequency is based upon the established monitoring frequency in the current permit.

Table 4: Monitoring Requirements For Outfall 101

PARAMETERS/STORET	MONITORING REQUIREMENTS	
	FREQUENCY OF MONITORING	SAMPLE TYPE
BOD_5 (STORET:00310)	5/week	12-hr Composite
TSS (STORET:00530)	5/week	12-hr Composite

D. WATER QUALITY BASED LIMITATIONS

1. General Comments

Effluent limitations and/or conditions established in the draft permit are in compliance with State water quality standards and the applicable water quality management plan.

2. Revised Water Quality Standards

The precertification document issued by the New Mexico Environment Department pursuant to Section 401 of the federal Clean Water Act is based upon the revised water quality standards currently effective under State law. In a letter from Marcy Leavitt (NMED) to Willie Lane (EPA) dated July 11, 2006, the State of New Mexico precertified that the discharge will comply with applicable provisions of Sections 208(e), 301, 302, 303, 306 and 307 of the Clean Water Act and with appropriate requirements of State law upon inclusion of the conditions stated below in the permit.

The NM WQCC adopted new WQS for the State of New Mexico. The revised WQS as amended through February 16, 2006, are available on the NMED's website at: http://www.nmenv.state.nm.us/swqb/Standards/20.6.4NMAC.pdf . The WQCC established the revised WQS in accordance with, and under authority of, the NM Water Quality Act [Chapter 74, Article 6, NMSA 1978 Annotated]. The WQS have not been approved by EPA in accordance with Section 303 of the CWA.

In accordance with State law, the Water Quality Standards (WQS) were properly filed with the State Records Center and publicly noticed in the NM Register May 13, 2005. The revised WQS became effective under State law on May 23, 2005 and Standards were amended through

February 16, 2006. The NMED has a non-discretionary duty to base state certification of federal water quality permits on applicable requirements of State law.

The agency is constrained by the "Alaska Rule" [Alaska Clean Water Alliance v. Clark, No. C96-1762R (W.D. Wash.)] in implementing the new NM WQS, until such time as the revised NM WQS are fully approved by EPA pursuant to Section 303 of the Clean Water Act. However, according to EPA memorandum from Geoffrey H. Grubbs, Director Office of Science and Technology dated September 15, 2000, if a State or tribe bases a section 401 certification on the more stringent state requirement, as allowed under CWA section 401(d), EPA would put the effluent limitations specified in the certification into an EPA-issued permit.

The Region, where appropriate, will draft permits with the new standards in place. If the new standards make more restrictive a limit, a compliance schedule will be placed in the permit. If a new parameter were added to the standards that would be added to the permit, then it would also get a compliance schedule. If the standard were less stringent than the currently approved standard, the Region would put the effluent limitation specified in the current Standards, until EPA approves the revised Standards. In addition, if the Region were required under a 401 certification to replace an effluent limitation of a pollutant for another effluent limitation of similar nature, the agency would include effluent limitations of both pollutants until the agency approves the revised Standards. However, the agency will grant a compliance schedule to allow the permittee sufficient time to achieve effluent limitation for the new parameter.

The State in its precertification, required EPA to replace fecal coliform with E. coli bacteria. EPA has included the limitations and monitoring requirements, as well as a compliance schedule for E. coli bacteria based on the condition of State precertification. However, EPA retained the limitations and monitoring requirements for fecal coliform bacteria in the proposed permit because fecal coliform is the EPA-approved bacteria in the current New Mexico Water Quality Standards (NM WQS). As a result, the permittee shall continue monitoring for both Fecal Coliform and E. coli bacteria until Fecal Coliform is replaced with E .coli in the Water Quality Management Plan. A six-month compliance schedule has also been included in the proposed permit to allow the permittee sufficient time to attain the new E. coli bacteria limits. See limitations and monitoring requirements for E. coli bacteria in the table below.

Table 5: Interim Effluent Limits Based on State's Precertification Requirements

PARAMETERS/STORET CODES	DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS					
	QUANTITY/LOADING lbs/day		QUALITY/CONCENTRATION (mg/L unless stated)			
	30-DAY AVG	7-DAY AVG	30-DAY AVG	7-DAY AVG	DAILY MAX	
E. coli Bacteria *1, *2, *3 Cfu/100 mL STORET: 51040		N/A	N/A	Report	N/A	Report

Table 6: Final Effluent Limits Based on State's Precertification Requirements

PARAMETERS/STORET CODES	DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS					
	QUANTITY/LOADING lbs/day		QUALITY/CONCENTRATION (mg/L unless stated)			
	30-DAY AVG	7-DAY AVG	30-DAY AVG	7-DAY AVG	DAILY MAX	
E. coli Bacteria *1, *2, *3 Cfu/100 mL STORET: 51040		N/A	N/A	548	N/A	2507

Footnotes

*1 E. coli bacteria is included in the proposed permit as a result of the revised New Mexico Water Quality Standards as amended through February 16, 2006.

*2 The permittee shall continue monitoring for both Fecal Coliform and E. coli bacteria until Fecal Coliform is replaced with E. coli bacteria in the Water Quality Management Plan.

*3 The permittee shall use only the State of New Mexico approved analytical methods as required by 20.6.4.14 NMAC, revised State of New Mexico Water Quality Standards as amended through February 16, 2006. The latest edition of Standards Methods, 20th Edition, contains methods for E. coli bacteria analysis, 9221-E and 9221-F that are consistent with the State of New Mexico approved analytical methods for wastewater. The permittee may use these or other approved method for E. coli bacteria analysis for wastewater until the time EPA approves the proposed 40 CFR 136 methods (Colilert, Colilert-18, m-ColiBlue 24, membrane filter method). At that time, all the aforementioned methods will be acceptable.

*4 Reporting requirements are daily maximum mass limits in lbs/day.

3. Segment Specific Water Quality-Based Limits

The Clean Water Act in Section 301 (b) requires that effluent limitations for point sources include any limitations necessary to meet water quality standards. Federal regulations found at [40 CFR 122.44 (d)] state that if a discharge poses the reasonable potential to cause an in-stream excursion above a water quality criterion, the permit must contain an effluent limit for that pollutant. Regulations promulgated at [40 CFR 122.44(d)] require limits in addition to or more stringent than effluent limitation guidelines (technology based).

In accordance with 20.6.4 NMAC, the permit must be developed to allow for the maintenance and attainment of acute numerical criteria at the point of discharge to the receiving stream and for the maintenance and attainment of chronic numerical criteria at the edge of the mixing zone.

The pollutant concentrations contained in the permit application were measured against State numeric water quality standards, and these are shown in the attached spreadsheet.

Based on the sampling results provided by the permittee, total aluminum and total copper showed reasonable potential to cause exceedances of both the current and revised State water quality numerical Standards. As a result, water quality-based effluent limitations, monitoring requirements, and a 3-year compliance schedule for total aluminum and total copper have been established in the proposed permit

The current permit requires monthly monitoring and reporting for total mercury. The permit application reported non-detect for total mercury. Also a review of the Discharge Monitoring Reports showed that total mercury did not show potential to exceed the revised Water Quality Standards (WQS). However, provisions for a monitoring requirement for total mercury have been included as a result of U.S. Fish and Wildlife Service (USFWS) concerns of potential impacts upon an endangered species in the area of the facility. As a result, the monitoring and reporting requirements for total mercury are proposed to be quarterly in the proposed permit.

The determination for effluent limitation has been derived in a manner consistent with the "Permit Writer's Guide to Water Quality-Based Permitting for Toxic Pollutants" (EPA 440/4-87-005), and the "Implementation Guidance for State of New Mexico Standards for Interstate and Intrastate Stream" dated May 5, 1995, and 40CFR122.45(c).

The permittee has not submitted sample results for vanadium, tritium, and 2,3,7,8-TCDD dioxin and will be required to submit test results for these parameters during the public comment period or be subject to limitations and monitoring requirements for these parameters in the final permit.

pH

Segment specific standards for 20.6.4.206 require pH to be between 6.6 – 9.0 standard units, which are more stringent than the WQMP limits of 6.0 to 9.0 standard units. The permit proposes pH limitations of 6.6 – 9.0 standard units.

Total Residual Chlorine & UV Disinfection

The Total Residual Chlorine (TRC) in the current as well as in the proposed permit is 11 ug/l. Hence, the discharger is required to meet the NO MEASURABLE Total Residual Chlorine at Outfalls 001 and 002, and will be included in the proposed permit, as follows:

After dechlorination and prior to final disposal, the effluent shall contain NO MEASURABLE TRC at any time. NO MEASURABLE will be defined as no detectable concentration of TRC as determined by any approved method established in 40 CFR Part 136. Thus, the "no measurable TRC concentration" for chlorine becomes the permit limit. If, during the term of this permit, the minimum quantification level for TRC becomes less than 11 ug/l, then 11 ug/l shall become the effluent limitation. The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes. The maximum dechlorinated TRC shall be monitored daily by grab sample. TRC shall be measured with fifteen (15) minutes of sampling. Monitoring for TRC shall be at Outfall 001 and 002 and not at Outfall 101.

Page 6 of the permit application states that the facility will switch to UV disinfection in 2007 with plant upgrades. The facility is required to continue daily chlorine monitoring at both Outfalls 001 and 002 since chlorine is used as a bacteria control chemical.

Table 7: Water Quality Based Limitations for Outfall 001 & 002

PARAMETERS/STORET CODES	DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS				
	QUANTITY/LOADING lbs/day		QUALITY/CONCENTRATION (mg/L unless stated)		
	30-DAY AVG	7-DAY AVG	30-DAY AVG	7-DAY AVG	DAILY MAX
Fecal Coliform Bacteria Colonies/100 mL STORET: 74055	N/A	N/A	500	N/A	500
TRC STORET:50060	N/A	N/A	N/A	N/A	11 ug/l
Total mercury STORET:71900	Report	Report *4	Report	N/A	Report
Total Aluminum STORET:01106	3.39	5.08 *4	58 ug/l	N/A	87 ug/l
Total Copper STORET:01042	3.4	5.10 *4	58.25	N/A	87.38

Solids and Foam

The existing permit's prohibition of the discharge of floating solids or visible foam in other than trace amounts is proposed to be continued in the reissued permit.

Monitoring Frequency For Limited Parameters

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity [40 CFR 122.48(b)] and assure compliance with permit limitations [40 CFR 122.44(i)(1)]. The monitoring frequency for Fecal Coliform and E. coli bacteria are proposed to be five times a week using a grab sample. Also monitoring for TRC is proposed to be daily, using a grab sample. pH shall be monitored five times a week by grab sample. Total mercury shall be monitored and reported quarterly using a 24-hour composite sample. Total aluminum and total copper are to be monitored monthly using a 24-hour composite sample.

5. Post Third Round Policy and Strategy

Section 101 of the Clean Water Act (CWA) states that "...it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited..." To insure that the CWA's prohibitions on toxic discharges are met, EPA has issued a "Policy for the Development of Water Quality-Based Permit Limitations for Toxic Pollutants 49 FR 9016-9019, March 9, 1984." In support of the national policy, Region 6 adopted the "Policy for Post Third Round NPDES Permitting" and the "Post Third Round NPDES Permit Implementation Strategy" on October 1, 1992. The Regional policy and strategy are designed to insure that no source will be allowed to discharge any wastewater which (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical State/Tribal water quality standard resulting in nonconformance with the provisions of [40 CFR 122.44(d)]; (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation which threatens human health.

The Region is currently implementing its post third round policy in conformance with the Regional strategy. Either technology-based effluent limitations reflecting the best controls available or additional water quality-based effluent limitations and/or conditions are included in the NPDES permits. State narrative and numerical water quality standards are used in conjunction with EPA criteria and other available toxicity information to determine the adequacy of technology-based permit limits and the need for additional water quality-based controls. Biomonitoring of the effluent is thereby required as a condition of this permit to assess potential toxicity.

6. Aquatic Toxicity Testing

a. General Comments

The State has established narrative criteria, which in part, state that:

"Surface waters of the State shall be free of toxic pollutants from in other than natural causes in amounts, concentrations or combinations that affect the propagation of fish or that are toxic to humans, livestock or other animals, fish or other aquatic organisms;..." (NM Standards Section 20.6.4.13.F.1)

The Implementation Guidance for NM Standards state that:

"Biomonitoring requirements will be applied to all major dischargers and those minor dischargers with known or potential problems to cause or contribute to exceedances of applicable NM Standards, numeric or narrative water quality criteria in waters with existing or designated fishery uses" (Section VI. Narrative Toxics Implementation).

The New Mexico Water Quality Control Commission revised the State's Water Quality Standards in 2005. A key concept in the 2005 revisions was to adopt the concept of aquatic life use protection in lieu of the former approach where subcategories of "fishery" use designations were employed. According to the "Toxics Implementation Guidance – Whole Effluent Toxicity" for the State of New Mexico dated December 16, 2005, biomonitoring requirements are included in the proposed permit because the receiving water is characterized with warmwater aquatic life as one of its designated uses.

b. Permit Action

The provisions of this section apply to Outfall 101.

The proposed permit requires the permittee to perform biomonitoring tests for Pimephales promelas and Ceriodaphnia dubia consistent with EPA's Post Third Round Policy and Strategy as well as the State's Implementation Guidance. The facility's design flow is 7.0 MGD (10.85 cfs), and the applicable 4Q3 is 0cfs. The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional effluent concentrations shall be 32%, 42%, 56%, 75%, and 100% based on a 0.75 dilution series with the low-flow effluent concentration defined as 100% effluent as the facility discharges to a receiving water with a critical low flow of 0 cfs. Since the critical dilution is above 10%, the facility is required to perform chronic testing. In addition, there is no mixing according to 20.6.4.11 – Applicability of Water Quality Standards, and chronic criteria applies.

The Narrative Toxics Implementation Guidance – Whole Effluent Toxicity, (NTIG-WET), an update to the 1995 Implementation Guidance, would normally provide for frequency reduction, unless a violation was detected. Due to the outfall location and potential impacts on this endangered species with established critical habitat, biomonitoring frequency is proposed at once/quarter for the permit, with no monitoring frequency reduction.

TOXICITY TESTS	FREQUENCY
7-day Ceriodaphnia dubia survival and reproduction test (Method 1002.0)[1]	Once/quarter
7-day fathead minnow Pimephales promelas larval survival and growth test (Method 1000.0)[1]	Once/quarter

1 Chronic freshwater Whole Effluent Toxicity Testing

The permittee shall submit the results of any toxicity testing performed in accordance with NPDES Permit No. NM0020311 Part II.B.

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and alkalinity shall be documented in a full report according to the appropriate test method publication. The full reports required by each test section need not be submitted unless requested. However, the full report is to be retained following the provisions of [40 CFR Part 122.41 (j) (2)]. The permit requires the submission of the toxicity testing information to be included on the DMR.

XIII. 303(d) LIST

The Pecos River, Segment No. 20.6.4.206, is not listed on the current "2004-2006 State of New Mexico 303(d) List for assessed Stream and River Reaches." The facility will meet the published water quality standards for this segment for all parameters and will meet the requirements of 40CFR122.44(d).

XIV. ANTIDEGRADATION

The NMAC, Section 20.6.4.8 "Antidegradation Policy and Implementation Plan" sets forth the requirements to protect designated uses through implementation of the State water quality standards. The limitations and monitoring requirements set forth in the proposed permit are developed from the State WQS and are protective of those designated uses. Furthermore, the policy sets forth the intent to protect the existing quality of those waters, whose quality exceeds their designated use. The permit requirements are protective of the assimilative capacity of the receiving waters, which is protective of the designated uses of that water, per NMAC 20.6.4.8.A.2.

XV. ANTIBACKSLIDING

The proposed permit is consistent with the requirements to meet Antibacksliding provisions of the Clean Water Act, Section 402(o) and 40CFR122.44(1)(2)(i)(B), which state in part that interim or final effluent limitations must be as stringent as those in the previous permit, unless information is available which was not available at the time of permit issuance. The proposed permit maintains the requirements of the previous permit, including all final effluent limitations.

XVI. REOPENER

The permit may be reopened and modified during the life of the permit if relevant portions of New Mexico's Water Quality Standards for Interstate and Intrastate Streams are revised or remanded by the New Mexico Water Quality Control Commission. In addition, the permit may be reopened and modified during the life of the permit if relevant procedures implementing the Water Quality Standards are either revised or promulgated by the New Mexico Environment Department. Should the State adopt a State water quality standard, this permit may be reopened to establish effluent limitations for the parameter(s) to be consistent with that approved State standard in accordance 40CFR122.44(d). The permit may also be reopened if EPA finds that more stringent conditions are warranted for the protection of threatened or endangered species and their critical habitat. Modification of the permit is subject to the provisions of 40CFR124.5.

XVII. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at US Fish and Wildlife Service (USFWS), Southwest Region 2 website, http://ifw2es.fws.gov/EndangeredSpecies/lists/, eleven species in Eddy County are listed as endangered or threatened. Federally listed as Endangered are the black-footed ferret *(Mustela nigripes)*, interior least tern *(Sterna antillarum)*, Northern aplomado falcon *(Falco femoralis septentrionalis)*, Pecos gambusia *(Gambusia nobilis)*, Kuenzler hedgehog cactus *(Echinocereus fendleri var Kuenzleri)* and the Sneed pincushion cactus *(Coryphantha sneedii var. sneedii)*. Listed as Threatened are the bald eagle *(Haliaeetus leucocephalus*), the Mexican spotted owl *(Strix occidentalis lucida)*, and the Lee pincushion cactus *(Coryphantha sneedii var. leei)*. Listed as Threatened with designated Critical Habitat are the Pecos bluntnose shiner *(Notropis simus pecosensis)* and Gypsum wild-buckwheat (*Eriogonum gypsophilum)*.

The facility currently holds a permit with USEPA. The proposed permit will be for the re-issuance of the current permit issued on November 16, 2001, with controls to meet the current state water quality standards for the area of discharge. The proposed permit ensures that the discharge does not cause or contribute to an exceedance of water quality criteria for irrigation, livestock watering, wildlife habitat, warmwater aquatic life, and secondary contact.

The EPA has made some determinations in the last permit cycle, which were concurred on by the Fish and Wildlife Service. These determinations are the following:

(1) That the reissuance of the City of Roswell Wastewater Treatment Facility (WWTF) permit will result in *no effect* on the threatened bald eagle, endangered black-footed ferret, northern aplomado falcon, Pecos gambusia, Kuenzler hedgehog cactus, and Pecos sunflower.

(2) That the reissuance of the City of Roswell Wastewater Treatment Facility permit *may affect*, but is not likely to *adversely affect* the Pecos bluntnose shiner and its critical habitat, and interior least tern.

The United State Fish and Wildlife Service (USFWS) did express concerns regarding the potential impacts of water pollution resulting from the facility discharge upon the interior lest tern population as the Roswell WWTF lies within the potential foraging range of the interior least tern population nesting at the Bitter Lake National Wildlife Refuge (BLNWR). In the opinion of the USFWS, water pollution may play a role in the decline of this species. Because of the role of mercury in decreased egg hatch in some species of birds, and due to the presence of fish in the Rio Hondo, the USFWS requested that the EPA include monitoring the facility effluent for Total mercury. Mercury was reported as non-detect in the permit application as well as in the Discharge monitoring Report. The proposed permit includes requirements to continue monitoring for mercury. Total mercury shall be monitored quarterly in the proposed permit as opposed to monthly monitoring, since the permit application and DMR reported non–detect for mercury.

The permit includes limitations and monitoring requirements for Total Residual Chlorine, Biochemical Oxygen Demand, Total Suspended Solids, Fecal Coliform Bacteria, E.coli bacteria, total aluminum, total copper, and pH. The permit also include biomonitoring requirements for Ceriodaphnia dubia and Pimephales promelas consistent with EPA's Post Third Round Policy and Strategy as well as State's Implementation Guidance.

After review, EPA concurs on the determinations made in the last permit cycle based on the following:

a. No changes have been made to the USFWS list of threatened and endangered species and critical habitat designation in the area of discharge since prior issuance of the permit.
b. EPA has received no additional information since the last permit issuance which would lead to revision (1) and (2) stated above.
c. EPA determines that items a and b result in no change to the environmental baseline established by the previous permit, therefore, EPA concludes that re-issuance of this permit will have "no effect" above the environmental baseline on the threatened bald eagle, endangered black-footed ferret, northern aplomado falcon, Pecos gambusia, Kuenzler hedgehog cactus, and Pecos sunflower nor will adversely affect the Pecos bluntnose shiner and its critical habitat, and interior least tern.

XVIII. VARIANCE REQUESTS

No variance requests have been received.

XIX. CONSIDERATION OF MONITORING FREQUENCY REDUCTION

EPA is not including reduced monitoring for conventional parameter in the permit, as a result of the Interim Guidance for Performance-Based Reduction of NPDES Permit Monitoring Frequencies (EPA 833-B-96-001, April 1996). The guidance excludes facilities that do not continuously discharge as candidates for monitoring frequency reduction as existing data may not be representative of year-round long-term performance.

XX. CERTIFICATION

The permit is in the process of certification by the State agency following regulations promulgated at [40 CFR 124.53]. A draft permit and draft public notice will be sent to the District Engineer, Corps of Engineers; to the Regional Director of the U.S. Fish and Wildlife Service and to the National Marine Fisheries Service prior to the publication of that notice.

XXI. FINAL DETERMINATION

The public notice describes the procedures for the formulation of final determinations.

XXII. PUBLIC NOTICE AND EPA POINT OF CONTACT

Upon publication of the public notice and this fact sheet, a public comment period shall begin and last for 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit to the EPA contact person listed below, and may request a public hearing to clarify issues involved in the permit decision. A public hearing request shall be in writing and shall state the nature of the issues to be raised in the hearing.

For additional information, contact:

Ms. Diane Smith
Water Quality Protection Division
Planning & Analysis Branch (6WQ-NP)
1445 Ross Avenue
Dallas, Texas 75202-2733
(214) 665-2145

XXIII. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

A. APPLICATION(S)

EPA Application Forms 1 and 2A signed December 25, 2005, received by EPA December 28, 2005.

B. 40 CFR CITATIONS

Sections 122, 124, 125, 133, 136

C. STATE OF NEW MEXICO REFERENCES

New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC, as amended through February 16, 2006.

Implementation Guidance for the State of New Mexico Standards for Interstate and Intrastate Streams, May 5, 1995.

Statewide Water Quality Management Plan, December 17, 2002.

State of New Mexico 303(d) List for Assessed Stream and River Reaches, 2004 -2006.

D. MISCELLANEOUS REFERENCES

EPA Region 6 "Policy for Post Third Round NPDES Permitting" and "Post Third Round NPDES Permit Implementation Strategy," October 1, 1992.

National Toxics Rule 57 FR 60848, December 22, 1992.

Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, EPA/600/4-89/001, March 1989.

Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, EPA/600/4-90/027, September 1991.

E. CORRESPONDENCE

Letter from Marcy Leavitt, NMED to Willie Lane, EPA, July 11, 2006, providing State Precertification.